

### **Remarks**

In response to the Office Action mailed on May 16, 2007, the Applicants respectfully request reconsideration in view of the following remarks. In the present application, independent claims 6, 13, and 36 have been amended. The claims have been amended to specify a single heterogeneous network comprising a plurality of sub-networks, the plurality of sub-networks comprising a combination of peer-to-peer and client/server network types, a combination of local and wide area networks, and a hybrid combination of physical and logical network constructions, the physical and logical network constructions including broadcast, network bus, network ring, and logical star constructions. Support for these amendments may be found on page 7, lines 6-13 in the Specification. No new matter has been added.

Claims 6, 9, 13, 19, 36, and 39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang (US 6,693,912) in view of Bahadiroglu (US 2002/0186660) and further in view of Huang (US 6,618,397). Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Bahadiroglu, Huang, and Official Notice.

### **Applicants' Statement of the Substance of the Interview**

A telephonic interview between the undersigned representative for the Applicants and the Examiner was held on June 17, 2008 to regarding proposed claim amendments to address various rejections made in the Office Action. The Examiner discussed the proposed amendments with the representative and indicated that they appeared to overcome the cited art of record. The Examiner also indicated that an updated search would be performed with respect to the newly added claim limitations.

### **Claim Rejections - 35 U.S.C. §103**

#### **Claims 6-7, 9, 13, 19, 36, and 39**

Claims 6, 9, 13, 19, 36, and 39 are rejected as being unpatentable over the combination of Wang, Bahadiroglu, and Huang. The rejection of these claims is respectfully traversed.

Amended independent claim 6 specifies a method executed by multiple dispersed devices for adapting data received from a remote sending device in a single heterogeneous network according to quality of service parameters associated with a plurality of network segments that are downstream from the dispersed devices. The method includes receiving at the dispersed devices instructions, wherein the instructions instruct the dispersed devices to adapt the data; receiving the data from the remote sending device; adapting the data to conform to quality of service parameters associated with each network segment downstream from one of the dispersed devices therein adapting the data at the dispersed devices rather than adapting the data at the remote sending device wherein the dispersed devices are located between the remote sending device and the plurality of network segments in the single heterogeneous network, the single heterogeneous network comprising a plurality of sub-networks, the plurality of sub-networks comprising a combination of peer-to-peer and client/server network types, a combination of local and wide area networks, and a hybrid combination of physical and logical network constructions, the physical and logical network constructions including broadcast, network bus, network ring, and logical star constructions, wherein the data is adapted by implementing a compression mechanism in response to a determination that a packet size of the data exceeds a maximum transmission unit (MTU) of each network segment; transmitting the adapted data along each network segment to one of a plurality of segment endpoints wherein the segment endpoints comprise at least one recipient client and at least one sub-segment dispersed device that further adapts the data previously adapted to conform the data according to quality of service parameters associated with a network sub-segment adjacent to and downstream from the at least one of the plurality of segment endpoints comprising the sub-segment dispersed device; and requesting new programming for adapting the data upon detecting changes in the quality of service parameters associated with at least one of the plurality of network segments; wherein values for the quality of service parameters vary among the plurality of network segments.

Wang discusses a plurality of networks (See LANs 2A and 2B in Fig. 1) and further discusses Quality of Service (QoS) mapping in multiple networks by generating a program mapping QoS in a first communication network to quality of service in a second

communication network so that the first and second communication networks may be interconnected and so that an end user may gain control over QoS mapping methods as an active packet travels from one network to another. (See column 1, line 53 through column 2, line 30).

Bahadiroglu discusses a network which may be a packet based system, such as the Internet and which may be comprised of a diverse range of networks linked to packet switched IP (Internet Protocol) backbones. (See paragraph 0073). Bahadiroglu also discusses an adaptive packet mechanism for optimizing data packet transmission between a sending and receiving node. (See abstract, paragraph 0071, and Fig. 6a).

Huang discusses group packet encapsulation and compression in which packet transmission performance is increased between two gateways or host computers by reducing data-link layer framing overhead, packet routing overhead in gateways, and packet header overhead and by increasing loss-level data compression ratio. Huang also discusses a network consisting of several nodes configured to communicate message traffic across the network. (See column 3, lines 47-55, column 8, lines 50-61, and Fig. 6).

It is respectfully submitted that the combination of Wang, Bahadiroglu, and Huang fails to teach, disclose, or suggest each of the features specified in amended independent claim 6. For example, the aforementioned combination fails to disclose that the single heterogeneous network comprises a plurality of sub-networks, the plurality of sub-networks comprising a combination of peer-to-peer and client/server network types, a combination of local and wide area networks, and a hybrid combination of physical and logical network constructions, the physical and logical network constructions including broadcast, network bus, network ring, and logical star constructions.

Wang, discussed above, shows two local area networks (see LANs 2A and 2B in Fig. 1) and thus fails to disclose the single heterogeneous network specified in amended claim 6. Furthermore, even assuming, *arguendo*, that the LANs 2A and 2B shown in Wang are sub-networks of a larger overall network, Wang fails to teach or suggest heterogeneous sub-networks comprising a combination of peer-to-peer and client/server network types, a combination of local and wide area networks, and a hybrid combination

of physical and logical network constructions, the physical and logical network constructions including broadcast, network bus, network ring, and logical star constructions. In contrast, Wang merely shows a homogeneous network of like networks, specifically, two local area networks.

Bahadiroglu fails to cure the deficiencies of Wang in that the reference also fails to disclose a single heterogeneous network comprising a combination of disparate sub-networks such as a combination of peer-to-peer and client/server network types, a combination of local and wide area networks, and a hybrid combination of physical and logical network constructions, the physical and logical network constructions including broadcast, network bus, network ring, and logical star constructions. In contrast, Bahadiroglu discusses a homogeneous wide area network (i.e., the Internet) in which various networks are linked to packet switched IP backbones.

Huang fails to cure the deficiencies of Wang and Bahadiroglu in that the reference merely discusses a network consisting of several nodes configured to communicate message traffic across the network. Thus, Huang is silent regarding a single heterogeneous network comprises a plurality of sub-networks, the plurality of sub-networks comprising a combination of peer-to-peer and client/server network types, a combination of local and wide area networks, and a hybrid combination of physical and logical network constructions, the physical and logical network constructions including broadcast, network bus, network ring, and logical star constructions, as specified in amended claim 6.

Based on the foregoing, amended claim 6 is allowable and the rejection of this claim should be withdrawn. Amended claims 13 and 36 specify similar features as amended claim 6 and thus are allowable for at least the same reasons. Therefore the rejection of these claims should also be withdrawn. Claims 9, 19, and 39 depend from amended claims 6, 13, and 36 and are thus allowable for at least the same reasons. Therefore, the rejection of these claims should also be withdrawn.

#### Claim 10

Claim 10 is rejected as being unpatentable over the combination of Wang, Bahadiroglu, Huang, and Official Notice. The rejection of this claim is respectfully

traversed. Claim 10 depends from amended claim 6 and thus specifies at least the same features. As discussed above, amended claim 6 is allowable over the combination of Wang, Bahadiroglu, and Huang.

The Office Action also alleges that Official Notice is taken that it is well known for the transmitting of quality of service parameters from the device to a network administrator. The Examiner is respectfully requested to provide a basis for the Official Notice. Even if a basis can be provided, the above discussed elements are still not rendered obvious by the combination of the cited references and the Official Notice.

### **Conclusion**

In view of the foregoing amendments and remarks, this application is now in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is invited to call the Applicants' attorney at the number listed below.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 13-2725.

Respectfully submitted,

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PATENT TRADEMARK OFFICE